

# Virginia Implementation Standard

For  
**Electronic Data Interchange**

TRANSACTION SET

# 867

**Product Transfer and Resale Report  
Historical Usage  
Ver/Rel 004010**

## **Summary of Changes**

August 27, 2001 Version 2-1FINAL	Issue final version 2.1 for 1/1/2002 Open Access
January 30, 2002 Version 2-1rev-01	Incorporate Change Control to send load profile and rate class.
February 1, 2002 Version 2-1rev-02	Add Allegheny Power to the references to PJM participants, like was done for Connectiv. 867HU Qty KZ and Qty KC
December 1, 2002 Version 2.2 Final	Updated version number as a result of review of the document for CSP Consolidated Billing impact. No changes required.
January 16, 2003 Version 2.2.1	Added note for certain participating Electric Cooperatives
February 24, 2003 Version 2.2.2	Added note for BARC, CVEC, C-BEC, MEC, NNEC, SVEC, and SEC.
March 21, 2003 Version 2.3	Approved Draft Version 2.2.2

## Notes

LDC Definition:	The term LDC (Local Distribution Company) in this document refers to the utility.
CSP Definition:	The terms CSP (Competitive Service Provider) and ESP (Energy Services Provider) are currently interchangeable.
How is an 867 Historical Usage requested?	The supplier sends an 814 HU Request to obtain an 867 HU. This Transaction is not used by BARC, CVEC, C-BEC, MEC, NNEC, SVEC, and SEC.
What data is sent in response to an 814 HU Request?	For the current billing account, the 867 HU will be returned with a minimum of 12 previous plus the current month's total consumption and the maximum measured demand. <b>Note:</b> The 814HU Response is optional. DVP does not send 814HU Accept Response.

# How to Use the Implementation Standard

**Segment:** **REF** Reference Identification  
**Position:** 070  
**Loop:** N1  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 12  
**Purpose:** To specify identifying information  
**Syntax Notes:** 1 At least one of REF02 or REF03 is required.  
**Semantic Notes:**  
**Comments:**

This section is used to show the X12 Rules for this segment. You must look further into the grayboxes below for State Rules. X12 Reference Description may not be required in this document.

<b>Notes:</b>	Recommended by UIG
<b>VA Implementation:</b>	Must be identical to account number as it appears on the customer's bill, excluding punctuation (spaces, dashes, etc.). Significant leading and trailing zeros must be included.
<b>VA Use:</b>	Required – when the rejection reason is due to a LDC account number not being provided in the original transaction, this segment must not be sent on the 824.
<b>Example:</b>	REF*12*2931839200

The "Notes:" section generally contains notes by the Utility Industry Group (UIG).

This section is used to show the individual State's Rules for implementation of this segment.

One or more examples.

## Data Element Summary

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification	M ID 2/3
		12	Billing Account	
			LDC-assigned account number for end use customer.	
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined by the Reference Identification Qualifier	X AN 1/30
			a particular Transaction Set or as specified by the Reference	

This column shows the use of each data element. If state rules differ, this will show "Conditional" and the conditions will be explained in the appropriate grayboxes.

These are X12 code descriptions, which often do not relate to the information we are trying to send. Unfortunately, X12 cannot keep up with our code needs so we often change the meanings of existing codes. See graybox for the UIG or state definitions.

This column shows the X12 attributes for each data element. Please refer to Data Dictionary for individual state rules.

M = Mandatory, O= Optional, X = Conditional

AN = Alphanumeric, N# = Decimal value, ID = Identification, R = Real

# 867 Product Transfer and Resale Report

## Historical Usage

### X12 Structure

Functional Group ID=**PT**

**Heading:**

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	010	ST	Transaction Set Header	M	1		
Must Use	020	BPT	Beginning Segment for Product Transfer and Resale	M	1		
			LOOP ID - N1			5	
	080	N1	Name	M	1		
	120	REF	Reference Identification	O	12		

**Detail:**

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
			LOOP ID - PTD			>1	
Must Use	010	PTD	Product Transfer and Resale Detail	M	1		
	030	REF	Reference Identification	O	20		
			LOOP ID - QTY			>1	
	110	QTY	Quantity	O	1		
	210	DTM	Date/Time Reference	O	10		

**Summary:**

	<u>Pos. No.</u>	<u>Seg. ID</u>	<u>Name</u>	<u>Req. Des.</u>	<u>Max.Use</u>	<u>Loop Repeat</u>	<u>Notes and Comments</u>
Must Use	030	SE	Transaction Set Trailer	M	1		

## Data Dictionary for 867 Historical Usage

<i>867Historical Usage</i>					
<i>Appl Field</i>	<i>Field Name</i>	<i>Description</i>	<i>EDI Segment</i>	<i>Related EDI Qualifier</i>	<i>Data Type</i>
<b>Header Information</b>					
1	Transaction Set Purpose Code	Purpose of transaction set.	BPT01 = <b>52</b>		X (2)
2	Transaction Reference Number (Reference Identification)	Unique Number identifying this transaction assigned by the sender of the transaction. This number should be unique over all time.	BPT02	BPT01 = <b>52</b>	X (30)
3	System Date	Transaction Creation Date -Date that the data was processed by the sender's application system.	BPT03	BPT01 = <b>52</b>	9(8)
4	Report Type Code	Code identifying that this transaction contains detailed usage information.	BPT04 = <b>DD</b>	BPT01 = <b>52</b>	X (2)
5	Entity Identifier Code	Identifies whether the LDC is the sender or the receiver of this transaction.	N101 = <b>8S</b>		X (1)
6	LDC Name	LDC Company Name	N102	N1: N101 = <b>8S</b>	X (60)
7	Identification Code Qualifier	LDC code designating the system/method of code structure used for Identification Code.	N103 = <b>1 or 9</b>	N1: N101 = <b>8S</b>	X (2)
8	LDC Duns (Identification Code)	LDC DUNS Number or DUNS+4 Number	N104	N1: N101 = <b>8S</b> and N103 = <b>1 or 9</b>	X (13)
9	Entity Identifier Code	Used in addition to the N103 and N104 to identify the transaction sender and receiver when more than two parties are identified by N1 loops. <b>40</b> - Receiver <b>41</b> - Submitter	N106 = <b>40</b> or <b>41</b>	N1: N101 = <b>8S</b>	X (2)
10	Entity Identifier Code	Code identifying an organizational entity. This is the ESP's code.	N101 = <b>SJ</b>	N1:	X (3)
11	ESP Name	ESP's Company Name	N102	N1: N101 = <b>SJ</b>	X (60)
12	Identification Code Qualifier	ESP's code designating the system/method of code structure used for Identification Code.	N103 = <b>1 or 9</b>	N1: N101 = <b>SJ</b>	X (2)
13	Entity Identifier Code	Code identifying an organizational entity. This code is the LDC's code.	N101 = <b>8S</b>	N1:	X (3)
14	ESP Duns (Identification Code)	ESP's DUNS Number or DUNS+4 Number	N104	N1: N101 = <b>SJ</b> N103 = <b>1 or 9</b>	X (13)
15	Entity Identifier Code	Identifies whether the ESP is the sender or the receiver of this transaction.	N106 = <b>40</b> or <b>41</b>	N1: N101 = <b>SJ</b>	X (2)
16	Entity Identifier Code	Code used to identify the customer associated with the LDC service account.	<b>N101 = 8R</b>	N1:	X (3)
17	Customer Name	Customer Name	N102	N1: N101 = <b>8R</b>	X (60)
18	Reference Identification Qualifier	Code qualifying the Reference Identification. <b>ESP</b> -assigned account number for the end use customer.	REF01 = <b>11</b>	N1: N101 = <b>8R</b> Loop REF01 = <b>11</b>	X (3)

19	ESP Account Number (Reference Identification)	Reference information as defined for a particular Transaction Set or as specified by the Reference Qualifier. ESP Customer Account Number	REF02	N1: N101 = <b>8R</b> and Loop REF01 = <b>11</b>	X (30)
20	Reference Identification Qualifier	Code qualifying the Reference Identification. <b>LDC</b> -assigned account number for the end use customer.	REF01 = <b>12</b>	N1: N101 = <b>8R</b>	X (3)
21	LDC Account Number (Reference Identification)	Reference information as defined for a particular Transaction Set or as specified by the Reference Qualifier. LDC Customer Account Number	REF02	N1: N101 = <b>8R</b> and Loop REF01 = <b>12</b>	X (30)
22	Reference Identification Qualifier	Code qualifying the Reference Identification. SDID - Service Delivery Identification used only by AEP	REF01 = <b>Q5</b>	N1: N101 = <b>8R</b>	X (3)
23	Description	A free form description to clarify the related data elements and their content. Only AEP assigned Service Delivery Identification number.	REF03	N1: N101 = <b>8R</b> and Loop REF01 = <b>Q5</b>	X (80)
24	Reference Identification Qualifier	Code qualifying the Reference Identification. LDC-assigned account number for the end use customer.	REF01 = <b>45</b>	N1: N101 = <b>8R</b>	X (3)
25	Old Account Number (Reference Identification)	Reference information as defined for a particular Transaction Set or as specified by the Reference Qualifier. Previous LDC Customer Account Number	REF02	N1: N101= <b>8R</b> Loop REF01 = <b>45</b>	X (30)
<b>Please refer to General Notes for details about the use of the PTD loop combinations.</b>					
<b>PTD Loop for Historical Usage that is Summarized/Totalized by Account (PTD01 = SU)</b>					
A PTD Loop will be provide for each type of consumption measured for the overall account (PTD01 = SU) or by meter (PTD01 = PM) in addition to the PTD Loop that provide Scheduling Determinants when appropriate.					
26	Loop Identification (Product Transfer Type Code)	Indicates if usage is provided totalized or by meter.	PTD01 = <b>SU</b>	PTD:	X (2)
27	Quantity Qualifier	Specifies type of quantity.	QTY01 = <b>QD</b>	PTD: QTY:	X (2)
28	Quantity (Delivered)	Represents quantity of consumption delivered for a billing period.	QTY02	PTD: QTY: QTY01 = <b>QD</b>	9(15)
29	Quantity Delivered Unit of Measurement (Unit or Basis for Measurement Code)	Indicates unit of measurement for quantity of consumption delivered during billing period. <b>K1</b> – Kilowatt Demand (kW) <b>KH</b> – Kilowatt Hour (kWh)	QTY03	PTD: QTY: QTY01 = <b>QD</b>	X (2)
30	Date/Time Qualifier	Specifies type of date/time or both date and time.	DTM01 = <b>150</b>	PTD:	X (2)
31	Service Period Start Date	Start date of the period for which the readings are provided.	DTM02 = <b>150</b>	PTM: DTM01 = <b>150</b>	9(8)
32	Date/Time Qualifier	Specifies type of date/time or both date and time.	DTM01 = <b>151</b>	PTD: DTM01 = <b>151</b>	X (2)
33	Service Period End Date	End date of the period for which the readings are provided.	DTM02	DTM01 = <b>151</b>	9(8)
<b>PTD Loop for Historical Usage that is provided by Meter (PD01 = PM)</b>					
34	Loop Identification (Product Transfer Type Code)	Indicates if usage is provided totalized or by meter.	PTD01 = <b>PM</b>	PTD:	X (2)

35	Reference Identification Qualifier	Code qualifying the Reference Identification.	REF01 = <b>MG</b>	PTD:	X (3)
36	Meter Number (Reference Identification)	Serial number of this specific meter (may have multiple meters).	REF02	PTD: REF01 = <b>MG</b>	X (30)
37	Reference Identification Qualifier	Code qualifying the Reference Identification.	REF01 = <b>MT</b>	PTD:	X (3)
38	Meter Type (Reference Identification)	Code indicating type of consumption measured & interval at which measurements are taken.	REF02	PTD: REF01 = <b>MT</b>	X (5)
39	Reference Identification Qualifier	Code qualifying the Reference Identification.	REF01 = <b>LO</b>	PTD:	X (3)
40	Profile Group (Reference Identification)	A code for the Load Profile used for this customer. Differs by LDC. Codes posted on LDC's Web site.	REF02	PTD: REF01 = <b>LO</b>	X (30)
41	Reference Identification Qualifier	Code qualifying the Reference Identification.	REF01 = <b>NH</b>	PTD:	X (3)
42	LDC Rate Code (Reference Identification)	LDC is charging code indicating the rate a customer per tariff. Codes posted on LDC's Web site	REF02	PTD: REF01 = <b>NH</b>	X (30)
43	Quantity Qualifier	Specifies type of quantity.	QTY01 = <b>QD</b>	PTD: QTY:	X (2)
44	Quantity Delivered Unit of Measurement (Unit or Basis for Measurement Code)	Indicates unit of measurement for quantity of consumption delivered during a billing period.	QTY03	PTD: QTY: QTY01 = <b>QD</b>	X (2)
45	Date/Time Qualifier	Specifies type of date/time or both date and time.	DTM01 = <b>150</b>	PTD:	X (2)
46	Service Period Start Date	Start date of the period for which the readings are provided.	DTM02	PTM: DTM01 = <b>150</b>	9(8)
47	Date/Time Qualifier	Specifies type of date/time or both date and time	DTM01 = <b>151</b>	PTD: DTM01 = <b>151</b>	X (2)
48	Service Period End Date	End date of the period for which the readings are provided	DTM02	DTM01 = <b>151</b>	9(8)

**PTD Loop for Scheduling Determinants (PTD01 = FG)**

This PTD provides Scheduling Determinants when appropriate

49	Loop Identification	Indicates if usage is provided totalized or by meter.	PTD01 = <b>FG</b>		X (2)
50	Reference Identification Qualifier	Code qualifying the Reference Identification.	REF01 = <b>LO</b>	PTD:	X (3)
51	Profile Group (Reference Identification)	A code for the Load Profile used for this customer. Differs by LDC. Codes posted on LDC's Web site.	REF02	PTD: REF01 = <b>LO</b>	X (30)
52	Reference Identification Qualifier	Code qualifying the Reference Identification.	REF01 = <b>NH</b>	PTD:	X (3)
53	LDC Rate Code (Reference Identification)	LDC is charging code indicating the rate a customer per tariff. Codes posted on LDC's Web site	REF02	PTD: REF01 = <b>NH</b>	X (30)
54	Quantity Qualifier	Specifies type of quantity	QTY01 = <b>KC</b>	PTR: QTY:	

54	Capacity Obligation (a.k.a Load Responsibility)	Peak load contributions provided to PJM for Installed Capacity calculation (coincident with PJM Peak).	QTY02	PTD: QTY01 = <b>KC</b>	9(15)
55	Unit of Measure	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03 = <b>K1</b>	PTD: QTY01 = <b>QD</b>	X (2)
56	Quantity Qualifier	Specifies type of quantity	QTY01 = <b>KZ</b>	PTR: QTY:	
57	Transmission Obligation	Customer's peak load contribution provided to PJM for the Transmission Service calculation (coincident with LDC peak).	QTY02	PTD: QTY01 = <b>KZ</b>	9(15)
58	Quantity Delivered Unit of Measurement	Indicates unit of measurement for quantity of consumption delivered during billing period.	QTY03 = <b>K1</b>	PTD: QTY01 = <b>QD</b>	X (2)

**Segment:** **ST** Transaction Set Header  
**Position:** 010  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the start of a transaction set and to assign a control number  
**Syntax Notes:**  
**Semantic Notes:** 1 The transaction set identifier (ST01) is used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

**Comments:**

<b>VA Use:</b>	Required
<b>Example:</b>	ST*867*000000001

**Data Element Summary**

	<b>Ref.</b>	<b>Data</b>		<b>X12 Attributes</b>
	<b>Des.</b>	<b>Element</b>	<b>Name</b>	
Must Use	ST01	143	<b>Transaction Set Identifier Code</b> Code uniquely identifying a Transaction Set	M ID 3/3
			867 Product Transfer and Resale Report	
Must Use	ST02	329	<b>Transaction Set Control Number</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M AN 4/9

**Segment:** **BPT** Beginning Segment for Product Transfer and Resale  
**Position:** 020  
**Loop:**  
**Level:** Heading  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the beginning of the Product Transfer and Resale Report Transaction Set and transmit identifying data  
**Syntax Notes:** 1 If either BPT05 or BPT06 is present, then the other is required.  
**Semantic Notes:** 1 BPT02 identifies the transfer/resale number.  
 2 BPT03 identifies the transfer/resale date.  
 3 BPT08 identifies the transfer/resale time.  
 4 BPT09 is used when it is necessary to reference a Previous Report Number.

**Comments:**

<b>VA Use:</b>	Required
<b>Example:</b>	BPT*52*1999070112300001*19990701*DD

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>X12 Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	BPT01	353	<b>Transaction Set Purpose Code</b> Code identifying purpose of transaction set	M ID 2/2
			52 Response to Historical Inquiry Response to a request for historical meter reading.	
Must Use	BPT02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	O AN 1/30
			A unique transaction identification number assigned by the originator of this transaction. This number should be unique over all time.	
Must Use	BPT03	373	<b>Date</b> Date expressed as CCYYMMDD	M DT 8/8
			Transaction Creation Date – the date that the data was processed by the application system.	
Must Use	BPT04	755	<b>Report Type Code</b> Code indicating the title or contents of a document, report or supporting item	O ID 2/2
			DD Distributor Inventory Report Usage	

**Segment:** **N1** Name  
**Position:** 080  
**Loop:** N1  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To identify a party by type of organization, name, and code  
**Syntax Notes:** 1 At least one of N102 or N103 is required.  
 2 If either N103 or N104 is present, then the other is required.

**Semantic Notes:**

**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.  
 2 N105 and N106 further define the type of entity in N101.

<b>VA Use:</b>	Required  Three N1 segments will be used in Virginia, where N101 = 8S, SJ, and 8R. The (end-use) Customer Account Number for the ESP and the LDC, and the Service Delivery Identification LDC's previous Customer Account Number, if applicable, are to be placed in REF segments following the N101=8R segment, with REF01 = 11, 12, and 45, respectively.
<b>Example:</b>	N1*8S*LDC COMPANY*1*007909411**41

**Data Element Summary**

	<b>Ref. Des.</b>	<b>Data Element</b>	<b>Name</b>	<b>X12 Attributes</b>
Must Use	N101	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual 8S Consumer Service Provider (CSP) LDC	<b>M ID 2/3</b>
Must Use	N102	93	<b>Name</b> Free-form name LDC Company Name	<b>X AN 1/60</b>
Must Use	N103	66	<b>Identification Code Qualifier</b> Code designating the system/method of code structure used for Identification Code (67) 1 D-U-N-S Number, Dun & Bradstreet 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	<b>X ID 1/2</b>
Must Use	N104	67	<b>Identification Code</b> Code identifying a party or other code LDC D-U-N-S Number or D-U-N-S+4 Number	<b>X AN 2/80</b>
Optional	N106	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual Used in addition to the N103 and N104 to identify the transaction sender and receiver when more than two parties are identified by N1 loops. 40 Receiver Entity to accept transmission 41 Submitter Entity transmitting transaction set	<b>O ID 2/3</b>

**Segment:** **N1** Name  
**Position:** 080  
**Loop:** N1  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To identify a party by type of organization, name, and code  
**Syntax Notes:** 1 At least one of N102 or N103 is required.  
 2 If either N103 or N104 is present, then the other is required.

**Semantic Notes:**

**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.  
 2 N105 and N106 further define the type of entity in N101.

<b>VA Use:</b>	Required Three N1 segments will be used in Virginia, where N101 = 8S, SJ, and 8R. The (end-use) Customer Account Number for the ESP and the LDC, the Service Delivery Identification and the LDC's previous customer Account Number, if applicable, are to be placed in REF segments following the N101=8R segment, with REF = 11,12,Q5 and 45, respectively.
<b>Example:</b>	N1*SJ*ESP COMPANY*9*007909422ESP1

**Data Element Summary**

	<b>Ref. Des.</b>	<b>Data Element</b>	<b>Name</b>	<b>X12 Attributes</b>
Must Use	N101	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual SJ Service Provider ESP	M ID 2/3
Must Use	N102	93	<b>Name</b> Free-form name ESP Company Name	X AN 1/60
Must Use	N103	66	<b>Identification Code Qualifier</b> Code designating the system/method of code structure used for Identification Code (67) 1 D-U-N-S Number, Dun & Bradstreet 9 D-U-N-S+4, D-U-N-S Number with Four Character Suffix	X ID 1/2
Must Use	N104	67	<b>Identification Code</b> Code identifying a party or other code ESP D-U-N-S Number or D-U-N-S+4 Number	X AN 2/80
Optional	N106	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual Used in addition to the N103 and N104 to identify the transaction sender and receiver when more than two parties are identified by N1 loops. 40 Receiver Entity to accept transmission 41 Submitter Entity transmitting transaction set	O ID 2/3

**Segment:** **N1** Name  
**Position:** 080  
**Loop:** N1  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To identify a party by type of organization, name, and code  
**Syntax Notes:** 1 At least one of N102 or N103 is required.  
 2 If either N103 or N104 is present, then the other is required.

**Semantic Notes:**

**Comments:** 1 This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.  
 2 N105 and N106 further define the type of entity in N101.

<b>Notes:</b>	Please note that while you may place your N1 segments in any order, the REF segments that follow must be contained within the N1*8R loop.
<b>VA Use:</b>	Required Three N1 segments will be used in Virginia, where N101 = 8S, SJ, and 8R. The (end-use) Customer Account Number for the ESP and the LDC, the Service Delivery Identification and the LDC's previous customer Account Number, if applicable, are to be placed in REF segments following the N101=8R segment, with REF = 11,12,Q5 and 45, respectively.
<b>Example:</b>	N1*8R*JANE DOE

**Data Element Summary**

	<b>Ref. Des.</b>	<b>Data Element</b>	<b>Name</b>	<b>X12 Attributes</b>
Must Use	N101	98	<b>Entity Identifier Code</b> Code identifying an organizational entity, a physical location, property or an individual 8R Consumer Service Provider (CSP) Customer End Use Customer	M ID 2/3
Must Use	N102	93	<b>Name</b> Free-form name Customer Name	X AN 1/60

**Segment:** **REF** Reference Identification  
**Position:** 120  
**Loop:** N1  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 12  
**Purpose:** To specify identifying information  
**Syntax Notes:** 1 At least one of REF02 or REF03 is required.  
 2 If either C04003 or C04004 is present, then the other is required.  
 3 If either C04005 or C04006 is present, then the other is required.  
**Semantic Notes:** 1 REF04 contains data relating to the value cited in REF02.  
**Comments:**

<b>VA Use:</b>	Required if it was previously provided to the LDC.
<b>Example:</b>	REF*11*8645835

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification 11 Account Number ESP-assigned account number for the end use customer.	<b>M ID 2/3</b>
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	<b>X AN 1/30</b>

**Segment:** **REF** Reference Identification  
**Position:** 120  
**Loop:** N1  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 12  
**Purpose:** To specify identifying information  
**Syntax Notes:** 1 At least one of REF02 or REF03 is required.  
 2 If either C04003 or C04004 is present, then the other is required.  
 3 If either C04005 or C04006 is present, then the other is required.  
**Semantic Notes:** 1 REF04 contains data relating to the value cited in REF02.  
**Comments:**

<b>VA Use:</b>	Required for all LDCs except AEP.
<b>Example:</b>	REF*12*519703123457

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification 12 Billing Account LDC-assigned account number for the end use customer.	<b>M ID 2/3</b>
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	<b>X AN 1/30</b>

**Segment:** **REF** Reference Identification  
**Position:** 120  
**Loop:** N1 Optional  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 12  
**Purpose:** To specify identifying information  
**Syntax Notes:**

- 1 At least one of REF02 or REF03 is required.
- 2 If either C04003 or C04004 is present, then the other is required.
- 3 If either C04005 or C04006 is present, then the other is required.

**Semantic Notes:**

- 1 REF04 contains data relating to the value cited in REF02.

**Comments:**  
**Notes:** SDID numbers will only contain uppercase letters (A to Z) and Digits (0 - 9). Note that punctuation (spaces, dashes, etc.) must be excluded, and leading and trailing zeros that are part of the SDID number must be present.  
**VA Use:** Required if customer is in AEP service territory  
**Example:** REF\*Q5\*\*9876543245678DCH

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification Q5 Property Control Number AEP assigned service delivery identification number	M ID 2/3
Must Use	REF03	352	<b>Description</b> A free form description to clarify the related data elements and their content AEP assigned service delivery identification number	X AN 1/80

**Segment:** **REF** Reference Identification  
**Position:** 120  
**Loop:** N1  
**Level:** Heading  
**Usage:** Optional  
**Max Use:** 12  
**Purpose:** To specify identifying information  
**Syntax Notes:** 1 At least one of REF02 or REF03 is required.  
 2 If either C04003 or C04004 is present, then the other is required.  
 3 If either C04005 or C04006 is present, then the other is required.  
**Semantic Notes:** 1 REF04 contains data relating to the value cited in REF02.  
**Comments:**

<b>VA Use:</b>	Optional: Recommended if account number has changed within the last 60 days. <b>Note:</b> Will use old LDC Account Number (as optional) for Utilities that have built in intelligence in their Account Numbers. Not used by AEP.
<b>Example:</b>	REF*45*451105687500

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification 45 Old Account Number LDC's previous account number for the end use customer.	<b>M ID 2/3</b>
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	<b>X AN 1/30</b>

**Segment:** **PTD** Product Transfer and Resale Detail  
**Position:** 010  
**Loop:** PTD  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data  
**Syntax Notes:** 1 If either PTD02 or PTD03 is present, then the other is required.  
 2 If either PTD04 or PTD05 is present, then the other is required.

**Semantic Notes:**

**Comments:**

<b>Notes:</b>	PTD loops may be sent in any order.
<b>VA Use:</b>	Required if providing Historical Usage summarized/totalized by account.
<b>Examples:</b>	PTD*SU

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	<b>PTD01</b>	<b>521</b>	<b>Product Transfer Type Code</b> Code identifying the type of product transfer	<b>M ID 2/2</b>
		SU	Summary Account Service Summary Total for the service for the account. This can include the reporting of unmetered service.	

**Segment:** QTY Quantity  
**Position:** 110  
**Loop:** QTY  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify quantity information  
**Syntax Notes:** 1 At least one of QTY02 or QTY04 is required.  
 2 Only one of QTY02 or QTY04 may be present.  
**Semantic Notes:** 1 QTY04 is used when the quantity is non-numeric.  
**Comments:**

<b>Notes:</b>	Each QTY/DTM loop conveys consumption information about one metering period.
<b>VA Use:</b>	Required
<b>Example:</b>	QTY*QD*5210*KH

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>X12 Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	QTY01	673	<b>Quantity Qualifier</b> Code specifying the type of quantity	M ID 2/2
			QD Quantity Delivered	
Must Use	QTY02	380	<b>Quantity</b> Numeric value of quantity	X R 1/15
Must Use	QTY03	355	<b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M ID 2/2
			K1 Kilowatt Demand (kW) Represents potential power load measured at predetermined intervals	
			KH Kilowatt Hour (kWh)	

**Segment:** **DTM** Date/Time Reference  
**Position:** 210  
**Loop:** QTY  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 10  
**Purpose:** To specify pertinent dates and times  
**Syntax Notes:**

- 1 At least one of DTM02, DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:**

**Comments:**

<b>Notes:</b>	This date reflects the start of the range for this meter for this billing period.
<b>VA Use:</b>	Required
<b>Example:</b>	DTM*150*19990630

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	DTM01	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time	M ID 3/3
			150 Service Period Start	
Must Use	DTM02	373	<b>Date</b> Date expressed as CCYYMMDD	X DT 8/8

**Segment:** **DTM** Date/Time Reference  
**Position:** 210  
**Loop:** QTY  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 10  
**Purpose:** To specify pertinent dates and times  
**Syntax Notes:**

- 1 At least one of DTM02, DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:**

**Comments:**

<b>Notes:</b>	This date reflects the end of the range for this meter for this billing period.
<b>VA Use:</b>	Required
<b>Example:</b>	DTM*151*19990701

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	DTM01	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time	M ID 3/3
			151 Service Period End	
Must Use	DTM02	373	<b>Date</b> Date expressed as CCYYMMDD	X DT 8/8

**Segment:** **PTD** Product Transfer and Resale Detail  
**Position:** 010  
**Loop:** PTD  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data  
**Syntax Notes:** 1 If either PTD02 or PTD03 is present, then the other is required.  
 2 If either PTD04 or PTD05 is present, then the other is required.

**Semantic Notes:**

**Comments:**

<b>Notes:</b>	PTD loops may be sent in any order.
<b>VA Use:</b>	Required if providing Historical Usage by meter.
<b>Examples:</b>	PTD*PM

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>X12 Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	PTD01	521	<b>Product Transfer Type Code</b> Code identifying the type of product transfer	M ID 2/2
			PM Physical Meter Information	
			Consumption Provided by Meter	

**Segment:** **REF** Reference Identification  
**Position:** 030  
**Loop:** PTD  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 20  
**Purpose:** To specify identifying information  
**Syntax Notes:** 1 At least one of REF02 or REF03 is required.  
 2 If either C04003 or C04004 is present, then the other is required.  
 3 If either C04005 or C04006 is present, then the other is required.  
**Semantic Notes:** 1 REF04 contains data relating to the value cited in REF02.  
**Comments:**

<b>VA Use:</b>	Required if providing Historical usage by meter.
<b>Example:</b>	REF*MG*87876567

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	<b>REF01</b>	<b>128</b>	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification MG Meter Number Meter ID Serial Number	<b>M ID 2/3</b>
Must Use	<b>REF02</b>	<b>127</b>	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	<b>X AN 1/30</b>

**Segment:** **REF** Reference Identification  
**Position:** 030  
**Loop:** PTD  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 20  
**Purpose:** To specify identifying information  
**Syntax Notes:** 1 At least one of REF02 or REF03 is required.  
 2 If either C04003 or C04004 is present, then the other is required.  
 3 If either C04005 or C04006 is present, then the other is required.  
**Semantic Notes:** 1 REF04 contains data relating to the value cited in REF02.  
**Comments:**

<b>VA Use:</b>	Optional
<b>Example:</b>	REF*MT*KHMON

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	<b>REF01</b>	<b>128</b>	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification MT Meter Ticket Number Meter Type - Billing Data Types and Interval Frequencies	<b>M ID 2/3</b>
Must Use	<b>REF02</b>	<b>127</b>	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier When REF01 is MT, the meter type is expressed as a five-character field. The first two characters are the types of consumption; the last three characters are the metering interval. Valid values can be a combination of the following values:	<b>X AN 1/30</b>

**Type of Consumption**

K1 Kilowatt Demand  
 KH Kilowatt Hour

**Metering Interval**

Nnn Number of minutes from 001 to 999  
 MON Monthly

For Example:

KHMON Kilowatt Hours Per Month  
 K1015 Kilowatt Demand per 15 minute interval

**Segment:** **REF** Reference Identification (LO=Load Profile)  
**Position:** 030  
**Loop:** PTD  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 20  
**Purpose:** To specify identifying information  
**Syntax Notes:** 1 At least one of REF02 or REF03 is required.  
 2 If either C04003 or C04004 is present, then the other is required.  
 3 If either C04005 or C04006 is present, then the other is required.  
**Semantic Notes:** 1 REF04 contains data relating to the value cited in REF02.

**Comments:**

<b>VA Use:</b>	Optional. If sending this segment, this location should be used when usage is sent at the meter level.
<b>Example:</b>	REF*LO*GS

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification LO Load Planning Number Load profile	M ID 2/3
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

**Segment:**     **REF** Reference Identification (NH=LDC Rate Class)  
**Position:**    030  
**Loop:**        PTD  
**Level:**       Detail  
**Usage:**       Optional  
**Max Use:**     20  
**Purpose:**       To specify identifying information  
**Syntax Notes:** 1 At least one of REF02 or REF03 is required.  
                   2 If either C04003 or C04004 is present, then the other is required.  
                   3 If either C04005 or C04006 is present, then the other is required.  
**Semantic Notes:** 1 REF04 contains data relating to the value cited in REF02.  
**Comments:**

<b>VA Use:</b>	Optional. If sending this segment, this location should be used when usage is sent at the meter level.
<b>Example:</b>	REF*NH*GS1

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	<b>REF01</b>	<b>128</b>	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification NH                   LDC Rate Code	<b>M ID 2/3</b>
Must Use	<b>REF02</b>	<b>127</b>	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	<b>X AN 1/30</b>

**Segment:** **QTY** Quantity  
**Position:** 110  
**Loop:** QTY  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify quantity information  
**Syntax Notes:** 1 At least one of QTY02 or QTY04 is required.  
 2 Only one of QTY02 or QTY04 may be present.  
**Semantic Notes:** 1 QTY04 is used when the quantity is non-numeric.  
**Comments:**

<b>Notes:</b>	Each QTY/DTM loop conveys consumption information about one metering interval.
<b>VA Use:</b>	Required if providing Historical Usage by meter.
<b>Example:</b>	QTY*QD*5210*KH

**Data Element Summary**

	<u>Ref.</u>	<u>Data</u>	<u>Name</u>	<u>X12 Attributes</u>
	<u>Des.</u>	<u>Element</u>		
Must Use	QTY01	673	<b>Quantity Qualifier</b> Code specifying the type of quantity	M ID 2/2
			QD Quantity Delivered	
Must Use	QTY02	380	<b>Quantity</b> Numeric value of quantity	X R 1/15
Must Use	QTY03	355	<b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M ID 2/2
			K1 Kilowatt Demand (kW) Represents potential power load measured at predetermined intervals	
			KH Kilowatt Hour (kWh)	

**Segment:** **DTM** Date/Time Reference  
**Position:** 210  
**Loop:** QTY  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 10  
**Purpose:** To specify pertinent dates and times  
**Syntax Notes:**

- 1 At least one of DTM02, DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:**

**Comments:**

<b>Notes:</b>	This date reflects the start of the range for this meter for this billing period.
<b>VA Use:</b>	Required
<b>Example:</b>	DTM*150*19990630

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	DTM01	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time	M ID 3/3
			150 Service Period Start	
Must Use	DTM02	373	<b>Date</b> Date expressed as CCYYMMDD	X DT 8/8

**Segment:** **DTM** Date/Time Reference  
**Position:** 210  
**Loop:** QTY  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 10  
**Purpose:** To specify pertinent dates and times  
**Syntax Notes:**

- 1 At least one of DTM02, DTM03 or DTM05 is required.
- 2 If DTM04 is present, then DTM03 is required.
- 3 If either DTM05 or DTM06 is present, then the other is required.

**Semantic Notes:**

**Comments:**

<b>Notes:</b>	This date reflects the end of the range for this meter for this billing period.
<b>VA Use:</b>	Required
<b>Example:</b>	DTM*151*19990701

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	DTM01	374	<b>Date/Time Qualifier</b> Code specifying type of date or time, or both date and time	M ID 3/3
			151 Service Period End	
Must Use	DTM02	373	<b>Date</b> Date expressed as CCYYMMDD	X DT 8/8

**Segment:** **PTD** Product Transfer and Resale Detail  
**Position:** 010  
**Loop:** PTD  
**Level:** Detail  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the start of detail information relating to the transfer/resale of a product and provide identifying data  
**Syntax Notes:** 1 If either PTD02 or PTD03 is present, then the other is required.  
 2 If either PTD04 or PTD05 is present, then the other is required.

**Semantic Notes:**

**Comments:**

<b>Notes:</b>	This PTD Loop will be used to provide Scheduling Determinants, such as the Capacity Obligation (a.k.a. Load Responsibility) and Transmission Obligation for PJM customers.
<b>VA Use:</b>	Optional As of market opening, Conectiv and AP plan to provide this loop (capacity – QTY*KC and transmission obligations – QTY*KZ only)
<b>Examples:</b>	PTD*FG

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	PTD01	521	<b>Product Transfer Type Code</b> Code identifying the type of product transfer	M ID 2/2
			FG	Flowing Gas Information Scheduling Determinants: This loop will provide information required by PJM.

**Segment:** **REF** Reference Identification (LO=Load Profile)  
**Position:** 030  
**Loop:** PTD  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 20  
**Purpose:** To specify identifying information  
**Syntax Notes:** 1 At least one of REF02 or REF03 is required.  
 2 If either C04003 or C04004 is present, then the other is required.  
 3 If either C04005 or C04006 is present, then the other is required.  
**Semantic Notes:** 1 REF04 contains data relating to the value cited in REF02.

**Comments:**

<b>VA Use:</b>	Optional. If sending this segment, this location should be used when usage is sent at the account level.
<b>Example:</b>	REF*LO*GS

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>X12 Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification LO Load Planning Number Load profile	M ID 2/3
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

**Segment:** **REF** Reference Identification (NH=LDC Rate Class)  
**Position:** 030  
**Loop:** PTD  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 20  
**Purpose:** To specify identifying information  
**Syntax Notes:** 1 At least one of REF02 or REF03 is required.  
 2 If either C04003 or C04004 is present, then the other is required.  
 3 If either C04005 or C04006 is present, then the other is required.  
**Semantic Notes:** 1 REF04 contains data relating to the value cited in REF02.  
**Comments:**

<b>VA Use:</b>	Optional. If sending this segment, this location should be used when usage is sent at the account level.
<b>Example:</b>	REF*NH*GS1

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	REF01	128	<b>Reference Identification Qualifier</b> Code qualifying the Reference Identification NH LDC Rate Code	M ID 2/3
Must Use	REF02	127	<b>Reference Identification</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	X AN 1/30

**Segment:** **QTY** Quantity  
**Position:** 110  
**Loop:** QTY  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify quantity information  
**Syntax Notes:** 1 At least one of QTY02 or QTY04 is required.  
 2 Only one of QTY02 or QTY04 may be present.  
**Semantic Notes:** 1 QTY04 is used when the quantity is non-numeric.  
**Comments:**

<b>Notes:</b>	Each QTY/MEA/DTM loop conveys consumption information about one metering period.
<b>VA Use:</b>	Optional As of market opening, Conectiv and AP plan to provide the QTY segment.
<b>Example:</b>	QTY*KC*752*K1

**Data Element Summary**

	<u>Ref.</u> <u>Des.</u>	<u>Data</u> <u>Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	<b>Quantity Qualifier</b> Code specifying the type of quantity KC Net Quantity Decrease Capacity Obligation, a.k.a., Load Responsibility: Peak load contributions provided to PJM for Installed Capacity calculation (coincident with PJM Peak).	M ID 2/2
Must Use	QTY02	380	<b>Quantity</b> Numeric value of quantity	X R 1/15
Must Use	QTY03	355	<b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand Represents potential power load measured at predetermined intervals	M ID 2/2

**Segment:** **QTY** Quantity  
**Position:** 110  
**Loop:** QTY  
**Level:** Detail  
**Usage:** Optional  
**Max Use:** 1  
**Purpose:** To specify quantity information  
**Syntax Notes:** 1 At least one of QTY02 or QTY04 is required.  
 2 Only one of QTY02 or QTY04 may be present.  
**Semantic Notes:** 1 QTY04 is used when the quantity is non-numeric.  
**Comments:**

<b>Notes:</b>	Each QTY/MEA/DTM loop conveys consumption information about one metering interval.
<b>VA Use:</b>	Optional As of market opening, Conectiv and AP planto provide this QTY segment.
<b>Example:</b>	QTY*KZ*752*K1

**Data Element Summary**

	<u>Ref. Des.</u>	<u>Data Element</u>	<u>Name</u>	<u>Attributes</u>
Must Use	QTY01	673	<b>Quantity Qualifier</b> Code specifying the type of quantity KZ Corrective Action Requests - Written Transmission Obligation: Customer's peak load contribution provided to PJM for the Transmission Service calculation (coincident with LDC peak).	M ID 2/2
Must Use	QTY02	380	<b>Quantity</b> Numeric value of quantity	X R 1/15
Must Use	QTY03	355	<b>Unit or Basis for Measurement Code</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken K1 Kilowatt Demand Represents potential power load measured at predetermined intervals	M ID 2/2

**Segment:** **SE** Transaction Set Trailer  
**Position:** 030  
**Loop:**  
**Level:** Summary  
**Usage:** Mandatory  
**Max Use:** 1  
**Purpose:** To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

**Syntax Notes:**

**Semantic Notes:**

**Comments:** 1 SE is the last segment of each transaction set.

<b>VA Use:</b>	Required
<b>Example:</b>	SE*23*00000001

#### Data Element Summary

	<u>Ref.</u>	<u>Data</u>		<u>X12 Attributes</u>
	<u>Des.</u>	<u>Element</u>	<u>Name</u>	
Must Use	SE01	96	<b>Number of Included Segments</b>	<b>M N0 1/10</b>
			Total number of segments included in a transaction set including ST and SE segments	
Must Use	SE02	329	<b>Transaction Set Control Number</b>	<b>M AN 4/9</b>
			Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	

**Example 1: Historical Usage Summarized by AEP SDID**

Historical Usage for a Single Meter measuring kWh and kW (non-interval) at the SDID level.

ST*867*00000001	Transaction Set Identifier Code: <b>867</b> Transaction Set Control Number: <b>00000001</b>
BPT*52*1999070112300001*19990701*DD	Transaction Set Purpose Code: <b>52</b> , <i>Response to Historical Inquiry</i> Reference Identification: <b>1999070112300001</b> Transaction Date: <b>19990701</b> Report Type Code: <b>DD</b> , <i>Usage</i>
N1*8S*LDC COMPANY*1*007909411	Entity Identifier Code: <b>8S</b> , <i>LDC Name follows</i> Name: <b>LDC COMPANY</b> Identification Code Qualifier: <b>1</b> , <i>DUNS Number follows</i> Identification Code: <b>007909411</b>
N1*SJ*ESP COMPANY*9*007909422ESP1	Entity Identifier Code: <b>SJ</b> , <i>ESP Name follows</i> Name: <b>ESP COMPANY</b> Identification Code Qualifier: <b>9</b> , <i>DUNS+4 Number follows</i> Identification Code: <b>007909422ESP1</b>
N1*8R*JANE DOE	Entity Identifier Code: <b>8R</b> , <i>Customer Name follows</i> Name: <b>JANE DOE</b>
REF*11*8645835	Reference Identification Qualifier: <b>11</b> , <i>ESP Account Number follows</i> Reference Identification: <b>8645835</b> , <i>LDC Account Number</i>
REF*Q5*519703123457WHW	Reference Identification Qualifier: <b>Q5</b> , <i>AEP Service Delivery ID Number follows</i> Reference Identification: <b>519703123457WHW</b> , <i>AEP Service Delivery ID Number</i>
PTD*SU	Product Transfer Type Code: <b>SU</b> , <i>Summary (Totalized)</i>
QTY*QD*5210*KH	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>5210</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
DTM*150*19990529	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990529</b>
DTM*151*19990630	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990630</b>
QTY*QD*5210*KH	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>5210</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
DTM*150*19990427	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990427</b>
DTM*151*19990529	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990529</b>
QTY*QD*4850*KH	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>4850</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
DTM*150*19990327	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990327</b>
DTM*151*19990427	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990427</b>
PTD*SU	Product Transfer Type Code: <b>SU</b> , <i>Summary (Totalized)</i>
QTY*QD*21*K1	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>21</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>K1</b> , <i>Kilowatt Demand</i>
DTM*150*19990529	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990529</b>
DTM*151*19990630	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990630</b>
QTY*QD*19*K1	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>19</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>K1</b> , <i>Kilowatt Demand</i>

<b>DTM*150*19990427</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990427</b>
<b>DTM*151*19990529</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990529</b>
<b>QTY*QD*23*K1</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>19</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>K1</b> , <i>Kilowatt Demand</i>
<b>DTM*150*19990327</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990327</b>
<b>DTM*151*19990427</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990427</b>
<b>PTD*FG</b>	<b>Scheduling Determinants Loop</b>
<b>REF*LO*RS</b>	Load Profile
<b>REF*NH*RESNH</b>	LDC Rate Code
<b>QTY*KC*752*K1</b>	Capacity Obligation
<b>QTY*KZ*752*K1</b>	Transmission Obligation
<b>SE*37*00000001</b>	Number of Segments: <b>37</b> Transaction Set Control Number: <b>00000001</b>

### Example 2: Historical Usage Multiple Meters

Historical Usage for a Multiple Metered Account measuring kWh and kW (non-interval) at the account level (illustrating the use of the PM Loops).

<b>ST*867*000000001</b>	Transaction Set Identifier Code: <b>867</b> Transaction Set Control Number: <b>000000001</b>
<b>BPT*52*991208205642380192*19991208*DD</b>	Transaction Set Purpose Code: <b>52</b> , <i>Response to Historical Inquiry</i> Reference Identification: <b>991208205642380192</b> Transaction Date: <b>19991208</b> Report Type Code: <b>DD</b> , <i>Usage</i>
<b>N1*8S*LDC COMPANY*1*452325698</b>	Entity Identifier Code: <b>8S</b> , <i>LDC Name follows</i> Name: <b>LDC COMPANY</b> Identification Code Qualifier: <b>1</b> , <i>DUNS Number follows</i> Identification Code <b>452325698</b>
<b>N1*SJ*ESP COMPANY*9*478965877ESP1</b>	Entity Identifier Code: <b>SJ</b> , <i>ESP Name follows</i> Name: <b>ESP COMPANY</b> Identification Code Qualifier: <b>9</b> , <i>DUNS+4 Number follows</i> Identification Code: <b>478965877ESP1</b>
<b>N1*8R*JOSEPH DOE</b>	Entity Identifier Code: <b>8R</b> , <i>Customer Name follows</i> Name: <b>JOSEPH DOE</b>
<b>REF*11*725698632541</b>	Reference Identification Qualifier: <b>11</b> , <i>ESP Account Number follows</i> Reference Identification: <b>725698632541</b> , <i>LDC Account Number</i>
<b>REF*12*75231658965</b>	Reference Identification Qualifier: <b>12</b> , <i>LDC Account Number follows</i> Reference Identification: <b>75231658965</b> , <i>LDC Account Number</i>

**Detail for MTR1:**

<b>PTD*PM</b>	Product Transfer Type Code: <b>PM</b> , <i>Physical Meter</i>
<b>REF MG MTR1</b>	Reference Identification MG, Meter Number
<b>REF MT KHMON</b>	Reference Identification MT, Kilowatt Hours Monthly
<b>QTY*QD*523*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>523</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19990810</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990810</b>
<b>DTM*151*19990712</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990712</b>
<b>QTY*QD*463*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>463</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19990712</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990712</b>
<b>DTM*151*19990610</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990610</b>
<b>QTY*QD*352*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>352</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19990610</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990610</b>
<b>DTM*151*19990511</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990511</b>
<b>QTY*QD*304*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>304</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>

DTM*150*19990511	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990511</b>
DTM*151*19990413	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990413</b>
QTY*QD*323*KH	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>323</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
DTM*150*19990413	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990413</b>
DTM*151*19990311	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990311</b>
QTY*QD*289*KH	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>289</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
DTM*150*19990311	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990311</b>
DTM*151*19990209	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990209</b>
QTY*QD*308*KH	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>308</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
DTM*150*19990209	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990209</b>
DTM*151*19990111	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990111</b>
QTY*QD*1024*KH	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>1024</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
DTM*150*19990111	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990111</b>
DTM*151*19991208	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19991208</b>
QTY*QD*93*KH	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>93</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>

**Detail for MTR2:**

PTD*PM	Product Transfer Type Code: <b>PM</b> , <i>Physical Meter</i>
REF MG MTR2	Reference Identification MG, Meter Number
REF MT KHMON	Reference Identification MT, Kilowatt Hours Monthly
QTY*QD*93*KH	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>93</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
DTM*150*20000110	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>20000110</b>
DTM*151*19991208	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19991208</b>
QTY*QD*151*KH	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>151</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
DTM*150*19991208	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19991208</b>
DTM*151*19991106	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19991106</b>
QTY*QD*134*KH	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>134</b> , <i>Quantity</i>

	Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19991106</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19991106</b>
<b>DTM*151*19991008</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19991008</b>
<b>QTY*QD*125*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>125</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19991008</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19991008</b>
<b>DTM*151*19990909</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990909</b>
<b>QTY*QD*107*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>107</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19990909</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990909</b>
<b>DTM*151*19990810</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990810</b>
<b>QTY*QD*110*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>110</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19990810</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990810</b>
<b>DTM*151*19990712</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990712</b>
<b>QTY*QD*127*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>127</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19990712</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990712</b>
<b>DTM*151*19990610</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990610</b>
<b>QTY*QD*78*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>78</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19990610</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990610</b>
<b>DTM*151*19990413</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990413</b>
<b>QTY*QD*86*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>86</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19990413</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990413</b>
<b>DTM*151*19990311</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990311</b>
<b>QTY*QD*100*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>100</b> <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19990311</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990311</b>
<b>DTM*151*19990209</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990209</b>
<b>QTY*QD*162*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>162</b> , <i>Quantity</i>

	Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19990209</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990209</b>
<b>DTM*151*19990111</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19990111</b>
<b>QTY*QD*172*KH</b>	Quantity Qualifier: <b>QD</b> , <i>Quantity Delivered</i> Quantity: <b>172</b> , <i>Quantity</i> Unit or Basis for Measurement Code: <b>KH</b> , <i>Kilowatt Hours</i>
<b>DTM*150*19990111</b>	Date/Time Qualifier: <b>150</b> , <i>Service Period Start</i> Date: <b>19990209</b>
<b>DTM*151*19981208</b>	Date/Time Qualifier: <b>151</b> , <i>Service Period End</i> Date: <b>19981208</b>

**Summary:**

<b>SE*90*00000001</b>	Number of Segments: 90 Transaction Set Control Number: <b>00000001</b>
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